

## ***Appendix C***

*Water Well Logs - Within 0.5 Miles of the Site*

## WATER WELL AND PUMP RECORD

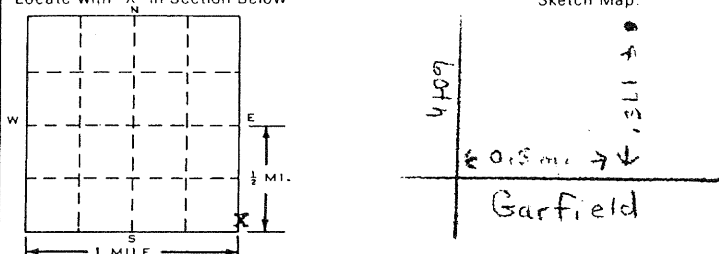
PERMIT NUMBER

1 LOCATION OF WELL		County <b>Ottawa</b>		Township Name <b>Folkston</b>		Fraction <b>NW 1/4 SW 1/4 SE 1/4</b>		Section Number <b>26</b>		Town Number <b>8</b>		Range Number <b>14</b>																															
Distance And Direction From Road Intersection		50' East of 60th Avenue - North of Garfield Rd.																																									
Street Address & City of Well Location		15384 60th Ave., Coopersville																																									
Locate with "X" in Section Below		Sketch Map:																																									
		2 FORMATION DESCRIPTION <table border="1"> <thead> <tr> <th>FORMATION DESCRIPTION</th> <th>THICKNESS OF STRATUM</th> <th>DEPTH TO BOTTOM OF STRATUM</th> </tr> </thead> <tbody> <tr> <td>Clay</td> <td>78</td> <td>78</td> </tr> <tr> <td>Sandy Clay &amp; Stones</td> <td>26</td> <td>104</td> </tr> <tr> <td>Clay</td> <td>31</td> <td>135</td> </tr> <tr> <td>Sand &amp; Gravel</td> <td>1</td> <td>136</td> </tr> <tr> <td>Clay &amp; Gravel</td> <td>13</td> <td>149</td> </tr> <tr> <td>Gypsum</td> <td>6</td> <td>155</td> </tr> <tr> <td>Gyp &amp; Shale</td> <td>5</td> <td>160</td> </tr> <tr> <td>Limestone, lost circulation</td> <td>19</td> <td>179</td> </tr> <tr> <td>Marshall Sandstone</td> <td>61</td> <td>240</td> </tr> </tbody> </table>												FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	Clay	78	78	Sandy Clay & Stones	26	104	Clay	31	135	Sand & Gravel	1	136	Clay & Gravel	13	149	Gypsum	6	155	Gyp & Shale	5	160	Limestone, lost circulation	19	179	Marshall Sandstone	61	240
FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM																																									
Clay	78	78																																									
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Gyp & Shale	5	160																																									
Limestone, lost circulation	19	179																																									
Marshall Sandstone	61	240																																									
3 OWNER OF WELL: <b>Mr. Dale Langeland</b>		Address <b>15384 60th Avenue, Coopersville, Michigan</b>																																									
Address Same As Well Location? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		4 WELL DEPTH: (completed) <b>240</b> ft. Date of Completion <b>Oct. 26, 1984</b>																																									
5 <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug		<input type="checkbox"/> Hollow rod <input type="checkbox"/> Auger <input type="checkbox"/> Jetted																																									
6 USE: <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Type I Public <input type="checkbox"/> Type III Public		<input type="checkbox"/> Irrigation <input type="checkbox"/> Type IIa Public <input type="checkbox"/> Heat pump																																									
<input type="checkbox"/> Test Well <input type="checkbox"/> Type IIb Public		7 CASING: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded																																									
Diameter <input checked="" type="checkbox"/> Plastic		Height: Above/Below Surface <b>1</b> ft.																																									
in. to ft. depth		Weight <b>2.8</b> lbs./ft.																																									
in. to ft. depth		Drive Shoe <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																									
Grouted Drill Hole Diameter <b>3</b> in. to <b>180</b> ft. depth		8 SCREEN: <input checked="" type="checkbox"/> Not Installed																																									
in. to ft. depth		Type _____ Diameter _____																																									
in. to ft. depth		Slot/Gauze _____ Length _____																																									
in. to ft. depth		Set between _____ ft. and _____ ft.																																									
in. to ft. depth		FITTINGS: <input type="checkbox"/> K-Packer <input type="checkbox"/> Lead Packer <input type="checkbox"/> Bremer Check																																									
in. to ft. depth		<input type="checkbox"/> Blank above screen _____ ft. Other _____																																									
9 STATIC WATER LEVEL: <b>21</b> ft. below land surface <input type="checkbox"/> Flow		10 PUMPING LEVEL: below land surface																																									
ft. after <b>4</b> hrs. pumping at <b>70</b> G.P.M.		ft. after _____ hrs. pumping at _____ G.P.M.																																									
11 WELL HEAD COMPLETION: <input checked="" type="checkbox"/> Pitless adapter <input type="checkbox"/> 12" above grade		<input type="checkbox"/> Basement offset <input type="checkbox"/> Approved pit																																									
12 WELL GROUTED? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes From <b>0</b> to <b>180</b> ft.		<input type="checkbox"/> Neat cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other _____																																									
No. of bags of cement _____ Additives _____		13 Nearest source of possible contamination																																									
Type <b>Septic Tank</b> Distance <b>100</b> ft. Direction <b>East</b>		Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																									
14 PUMP: <input type="checkbox"/> Not Installed <input type="checkbox"/> Pump Installation Only		Manufacturer's name <b>Aermotor</b>																																									
Model number <b>A12-75</b> HP <b>3/4</b> Volts <b>280</b>		Length of Drop Pipe <b>70</b> ft. capacity <b>15</b> G.P.M.																																									
TYPE: <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Jet		PRESSURE TANK: <b>Antrol</b>																																									
Manufacturer's name <b>Antrol</b>		Model number <b>WX 203</b> Capacity _____ Gallons																																									
15. Remarks. elevation, source of data, etc.		16. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. <b>Raymer Company, Inc.</b> <b>0384</b> REGISTERED BUSINESS NAME REGISTRATION NO. Address <b>3311 Three Mile Rd., N.W., Grand Rapids, MI</b> Signed <b>R. F. Heubacker</b> <b>Dec. 3, 1984</b> AUTHORIZED REPRESENTATIVE																																									

## WATER WELL AND PUMP RECORD

PERMIT NUMBER

70-05-16-400-0

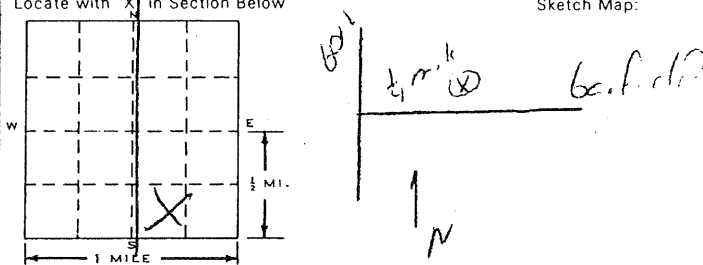
1 LOCATION OF WELL		Township Name		Fraction	Section Number	Town Number	Range Number
County <b>Ottawa</b>		<b>Polkton</b>		<b>SE 1/4 SE 1/4 SEE</b>	<b>26</b>	<b>8 N/SX</b>	<b>14 EW</b>
Distance And Direction From Road Intersection <b>About 0.5 Mi. East of 60th Ave. &amp; Garfield Then about 175ft. North of Garfield</b>				3 OWNER OF WELL: <b>Roy Visser</b> Address <b>5613 Garfield</b> <b>Coopersville, MI 49404</b> Address Same As Well Location? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Street Address & City of Well Location Locate with "X" in Section Below				4 WELL DEPTH: <b>93</b> FT. Date Completed <b>3 22 91</b> <input type="checkbox"/> New Well <input checked="" type="checkbox"/> Replacement Well			
Sketch Map: 				5 <input checked="" type="checkbox"/> Cable tool <input type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug <input type="checkbox"/> Hollow rod <input type="checkbox"/> Auger <input type="checkbox"/> Jetted			
2 FORMATION DESCRIPTION				6 USE: <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Type I Public <input type="checkbox"/> Type III Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Type IIa Public <input type="checkbox"/> Heat pump <input type="checkbox"/> Test Well <input type="checkbox"/> Type IIb Public			
		THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	7 CASING: <input checked="" type="checkbox"/> Steel <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Plastic <input type="checkbox"/> Welded Diameter <b>4</b> in. to <b>83</b> ft. depth Grouted Drill Hole Diameter <b>4</b> in. to <b>83</b> ft. depth Height: Above/Below <b>1</b> ft. Surface <b>1</b> ft. Weight <b>1</b> lbs./ft. Drive Shoe <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Sand and Hard Pan		5	5	8 SCREEN: <input type="checkbox"/> Not Installed Type <b>Stainless</b> Diameter <b>4"</b> Slot <b>10</b> Length <b>10'</b> Set between <b>83</b> ft. and <b>93</b> ft. FITTINGS: <input checked="" type="checkbox"/> K-Packer <input type="checkbox"/> Lead Packer <input type="checkbox"/> Bremer Check <input checked="" type="checkbox"/> Blank above screen <b>2</b> ft. Other <b>3" plug</b>			
Clay, blue		53	58	9 STATIC WATER LEVEL: <input checked="" type="checkbox"/> Flow _____ ft. below land surface			
Clay, gray and gravel		22	80	10 PUMPING LEVEL: below land surface _____ ft. after _____ hrs. pumping at <b>60</b> G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.			
Sand, tan, very clean				11 WELL HEAD COMPLETION: <input checked="" type="checkbox"/> Pitless adapter <input type="checkbox"/> 12" above grade <input type="checkbox"/> Basement offset <input type="checkbox"/> Approved pit			
waterbearing		13	93	12 WELL GROUTED? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes From <b>3 1/2</b> to <b>20</b> ft. <input type="checkbox"/> Neat cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other _____ No. of bags of cement <b>4</b> Additives _____			
				13 Nearest source of possible contamination Type _____ Distance _____ ft. Direction _____ Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Was old well plugged? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
				14 PUMP: <input type="checkbox"/> Not Installed <input type="checkbox"/> Pump Installation Only Manufacturer's name <b>Goulds - Serial #A087561</b> Model number <b>25EL10412</b> HP <b>1</b> Volts <b>230</b> Length of Drop Pipe <b>63</b> ft. capacity <b>25</b> G.P.M. TYPE: <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Jet PRESSURE TANK: <b>A. O. Smith</b> Manufacturer's name <b>A. O. Smith</b> Model number <b>V-140</b> Capacity <b>44</b> Gallons			
15. Remarks, elevation, source of data, etc.				16. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. <b>M &amp; W Hecksel Bros., 70-0337</b> REGISTERED BUSINESS NAME REGISTRATION NO. Address <b>9175 Cleveland, Nunica, MI 49448</b> Signed <b>Mark Hecksel</b> Date <b>May 9, 1991</b> AUTHORIZED REPRESENTATIVE			
17. Rig Operator's Name: <b>William Hecksel</b>				Authority: <b>Completion:</b> Act 368 PA 1978 Required Penalty: Conviction of a violation of any provision is a misdemeanor.			

## WATER WELL AND PUMP RECORD

PERMIT NUMBER

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70-5-26-400-012

<b>1 LOCATION OF WELL</b>		
County <b>CITANIA</b>	Township Name <b>ROASTON</b>	Fraction <b>1/4 1/4 1/4</b>
Section Number <b>26</b>		
Town Number <b>8 N/S</b>		
Range Number <b>14 NW</b>		
Distance And Direction From Road Intersection <b>1/2 mi. N. 1/4 Sec. 26</b>		
Street Address & City of Well Location <b>500 6th St</b>		
Locate with "X" in Section Below		
Sketch Map: 		
<b>2 FORMATION DESCRIPTION</b>		
FORMATION DESCRIPTION <b>Excavating deep well</b>	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
<b>Jet. Replaced pump and</b>		
<b>pump (41 ft. deep)</b>		
<b>3 OWNER OF WELL:</b>		
Address <b>CLIFFORD COURTER</b>		
Address Same As Well Location? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>4 WELL DEPTH:</b>		
Date Completed <b>5 15 91</b>		
WELL DEPTH <b>90 FT.</b>		
<input type="checkbox"/> New Well <input checked="" type="checkbox"/> Replacement Well		
<b>5</b>		
<input type="checkbox"/> Cable tool <input type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug		
<input type="checkbox"/> Hollow rod <input type="checkbox"/> Auger <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Other		
<b>6 USE:</b>		
<input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Type I Public <input type="checkbox"/> Type III Public		
<input type="checkbox"/> Irrigation <input type="checkbox"/> Type IIa Public <input type="checkbox"/> Heat pump		
<input type="checkbox"/> Test Well <input type="checkbox"/> Type IIb Public <input type="checkbox"/> Other		
<b>7 CASING:</b>		
Diameter <input checked="" type="checkbox"/> Steel <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Plastic <input type="checkbox"/> Welded		
Height: Above/Below <b>3</b> ft.		
Surface <b>3</b> ft.		
Weight _____ lbs./ft.		
Drive Shoe <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>8 SCREEN:</b>		
<input type="checkbox"/> Not Installed		
Type <b>Bremer</b> Diameter <b>2"</b>		
Slot/Gauze _____ Length <b>4'</b>		
Set between <b>87</b> ft. and <b>93</b> ft.		
FITTINGS: <input type="checkbox"/> K-Packer <input type="checkbox"/> Lead Packer <input type="checkbox"/> Bremer Check		
<input type="checkbox"/> Blank above screen _____ ft. Other _____		
<b>9 STATIC WATER LEVEL:</b>		
<b>3</b> ft. below land surface <input checked="" type="checkbox"/> Flow		
<b>10 PUMPING LEVEL:</b> below land surface		
_____ ft. after _____ hrs. pumping at _____ G.P.M.		
_____ ft. after _____ hrs. pumping at _____ G.P.M.		
<b>11 WELL HEAD COMPLETION:</b>		
<input type="checkbox"/> Pitless adapter <input type="checkbox"/> 12" above grade		
<input type="checkbox"/> Basement offset <input checked="" type="checkbox"/> Approved pit		
<b>12 WELL GROUTED?</b>		
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes From _____ to _____ ft.		
<input type="checkbox"/> Neat cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____		
No. of bags of cement _____ Additives _____		
<b>13 Nearest source of possible contamination</b>		
Type <b>SDI</b> Distance <b>50</b> ft. Direction <b>N</b>		
Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Was old well plugged? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>14 PUMP:</b>		
<input type="checkbox"/> Not Installed <input checked="" type="checkbox"/> Pump Installation Only		
Manufacturer's name _____		
Model number _____ HP <b>1</b> Volts _____		
Length of Drop Pipe _____ ft. capacity _____ G.P.M.		
TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet		
PRESSURE TANK: <b>Deep Well Jet</b> <b>510</b> <b>PSI</b>		
Manufacturer's name _____		
Model number _____ Capacity _____ Gallons		
<b>15. Remarks, elevation, source of data, etc.</b>		
<b>Re-Model</b>		
<b>16. WATER WELL CONTRACTOR'S CERTIFICATION:</b>		
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.		
REGISTERED BUSINESS NAME _____ REGISTRATION NO. _____		
Address _____		
Signed <b>X</b> <b>CLIFFORD</b> AUTHORIZED REPRESENTATIVE Date <b>7-18-91</b>		





# Water Well And Pump Record

Completion is required under authority of Part 127 Act 368 PA 1978.



Import ID:

Failure to comply is a misdemeanor.

<b>Tax No:</b> 70-05-26-226-016	<b>Permit No:</b> 05-411	<b>County:</b> Ottawa	<b>Township:</b> Polkton
<b>Well ID: 700000006762</b>		<b>Town/Range:</b> 08N 14W	<b>Section:</b> 26
		<b>Well Status:</b> Active	<b>WSSN:</b>
		<b>Source ID/Well No:</b>	
		<b>Distance and Direction from Road Intersection:</b> Well south of Randall	
<b>Elevation:</b>		<b>Well Owner:</b> Carol Pfahler	
<b>Latitude:</b> 43.05674		<b>Well Address:</b>	
<b>Longitude:</b> -85.93006		140 W. Randall	
<b>Method of Collection:</b> GPS Std Positioning Svc SA Off		Coopersville, MI 49404	
		<b>Owner Address:</b>	
		140 W. Randall	
		Coopersville, MI 49404	

<b>Drilling Method:</b> Cable Tool	<b>Well Use:</b> Household	<b>Pump Installed:</b> Yes	<b>Pump Installation Only:</b> No
<b>Well Depth:</b> 132.00 ft.	<b>Date Completed:</b> 10/10/2005	<b>Pump Installation Date:</b> 10/10/2005	<b>HP:</b> 0.50
<b>Well Type:</b> Replacement		<b>Manufacturer:</b> Goulds	<b>Pump Type:</b> Submersible
<b>Casing Type:</b> Steel - galvanized	<b>Height:</b> 1.00 ft. above grade	<b>Model Number:</b> 10GS-5412	<b>Pump Capacity:</b> 10 GPM
<b>Casing Joint:</b> Threaded & coupled		<b>Drop Pipe Length:</b> 63.00 ft.	<b>Pump Voltage:</b>
<b>Casing Fitting:</b> Drive shoe		<b>Drop Pipe Diameter:</b> 1.25 in.	<b>Drilling Record ID:</b>
<b>Diameter:</b> 4.00 in. to 127.00 ft. depth		<b>Draw Down Seal Used:</b> Yes	
<b>Borehole:</b> 8.00 in. to 15.00 ft. depth		<b>Pressure Tank Installed:</b> Yes	
4.00 in. to 132.00 ft. depth		<b>Pressure Tank Type:</b> Diaphragm/bladder	
		<b>Manufacturer:</b> Well-Mate	
		<b>Model Number:</b> WM-14	<b>Tank Capacity:</b> 47.0 Gallons
		<b>Pressure Relief Valve Installed:</b> Yes	
<b>Static Water Level:</b> 20.00 ft. Above Grade (Flowing)			
<b>Well Yield Test:</b>	<b>Yield Test Method:</b> Plunger		
1.00 hrs. at 40 GPM			
<b>Unrestricted Flow Rate:</b>			
<b>Screen Installed:</b> Yes	<b>Filter Packed:</b> No		
<b>Screen Diameter:</b> 3.00 in.	<b>Blank:</b> 2.00 ft. Above		
<b>Screen Material Type:</b> Stainless steel-slotted			
<b>Slot</b>	<b>Length</b>	<b>Set Between</b>	
7.00	5.00 ft.	127.00 ft. and 132.00 ft.	
<b>Fittings:</b> Neoprene packer			
<b>Well Grouted:</b> Yes	<b>Grouting Method:</b> Driven/dry grout		
<b>Grouting Material</b>	<b>Bags</b>	<b>Additives</b>	<b>Depth</b>
Bentonite dry granular	4.00	None	4.00 ft. to 127.00 ft.
<b>Wellhead Completion:</b> Pitless adapter			
<b>Nearest Source of Possible Contamination:</b>		<b>Drilling Machine Operator Name:</b> Gordon Hill	
<b>Type</b>	<b>Distance</b>	<b>Direction</b>	<b>Employment:</b> Employee
Septic tank	60 ft.	East	<b>Pump Installer:</b> Steven Hecksel
<b>Abandoned Well Plugged:</b> Yes			<b>Contractor Type:</b> Water Well Drilling Contractor
			<b>Reg No:</b> 70-0337
			<b>Business Name:</b> Hecksel Bros. Well Drilling
			<b>Business Address:</b> 9175 Cleveland, Nunica, MI, 49448
<b>Casing Diameter:</b> 3 in.	<b>Casing Removed:</b> No	<b>Water Well Contractor's Certification</b>	
<b>Plugging Material:</b> Bentonite chips/pellets		This well was drilled under my supervision and this report is true to the best of my knowledge and belief.	
<b>No. of Bags:</b> 7.00	<b>Well Depth:</b> 127 ft.	<b>Signature of Registered Contractor</b>	<b>Date</b>
<b>General Remarks:</b> Old well-13ft E then 4ft N of NW corner of house. Removed 63 ft 1 1/4" drop pipe & packer jet & Pitless adapter 4 ft below grade			
<b>Other Remarks:</b>			

26-4



# Water Well And Pump Record

Completion is required under authority of Part 127 Act 368 PA 1978.



Import ID:

Failure to comply is a misdemeanor.

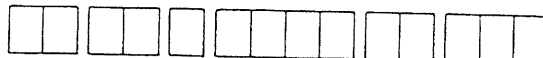
<b>Tax No:</b> 70-05-26-226-028	<b>Permit No:</b> 09-009	<b>County:</b> Ottawa	<b>Township:</b> Polkton
<b>Well ID: 70000008289</b>  <b>Elevation:</b>  <b>Latitude:</b> 43.05767  <b>Longitude:</b> -85.93077  <b>Method of Collection:</b> GPS Std Positioning Svc SA Off		<b>Town/Range:</b> 08N 14W	<b>Section:</b> 26
		<b>Well Status:</b> Active	<b>WSSN:</b>
		<b>Source ID/Well No:</b>	
		<b>Distance and Direction from Road Intersection:</b> Well is about .2 miles West of East St.; then about .14 Miles South of Randall.	
		<b>Well Owner:</b> Jim Lown	
		<b>Well Address:</b> 150 W. Randall Coopersville, MI 49404	<b>Owner Address:</b> 150 W. Randall Coopersville, MI 49404

<b>Drilling Method:</b> Cable Tool <b>Well Depth:</b> 134.00 ft. <b>Well Type:</b> Replacement	<b>Well Use:</b> Household <b>Date Completed:</b> 1/13/2009	<b>Pump Installed:</b> Yes <b>Pump Installation Date:</b> 1/14/2009 <b>Manufacturer:</b> Goulds <b>Model Number:</b> 10LS05421 <b>Drop Pipe Length:</b> 60.00 ft. <b>Drop Pipe Diameter:</b> 1.25 in. <b>Draw Down Seal Used:</b> Yes	<b>Pump Installation Only:</b> No <b>HP:</b> 0.50 <b>Pump Type:</b> Submersible <b>Pump Capacity:</b> 12 GPM <b>Pump Voltage:</b> <b>Drilling Record ID:</b>																																										
<b>Casing Type:</b> Steel - galvanized <b>Casing Joint:</b> Threaded & coupled <b>Casing Fitting:</b> Drive shoe	<b>Height:</b> 1.00 ft. above grade	<b>Pressure Tank Installed:</b> Yes <b>Pressure Tank Type:</b> Diaphragm/bladder <b>Manufacturer:</b> Flex-Lite-Flexcon <b>Model Number:</b> FL <b>Tank Capacity:</b> 35.0 Gallons <b>Pressure Relief Valve Installed:</b> Yes																																											
<b>Diameter:</b> 4.00 in. to 126.00 ft. depth																																													
<b>Borehole:</b>																																													
<b>Static Water Level:</b> 26.00 ft. Below Grade <b>Well Yield Test:</b> Pumping level 28.00 ft. after 1.00 hrs. at 50 GPM		<b>Yield Test Method:</b> Plunger																																											
<b>Screen Installed:</b> Yes <b>Screen Diameter:</b> 3.00 in. <b>Screen Material Type:</b> Stainless steel-wire wrapped <b>Slot Length:</b> 7.00 8.00 ft. <b>Filter Packed:</b> No <b>Blank:</b> 2.00 ft. Above <b>Set Between:</b> 126.00 ft. and 134.00 ft.		<table border="1"> <thead> <tr> <th>Formation Description</th> <th>Thickness</th> <th>Depth to Bottom</th> </tr> </thead> <tbody> <tr><td>Black Topsoil Sandy</td><td>1.00</td><td>1.00</td></tr> <tr><td>Brown Sand</td><td>11.00</td><td>12.00</td></tr> <tr><td>Brown Clay &amp; Sand</td><td>6.00</td><td>18.00</td></tr> <tr><td>Gray Clay Soft</td><td>27.00</td><td>45.00</td></tr> <tr><td>Gray Clay &amp; Gravel</td><td>25.00</td><td>70.00</td></tr> <tr><td>Gray Clay Soft</td><td>38.00</td><td>108.00</td></tr> <tr><td>Gray Clay &amp; Gravel</td><td>6.00</td><td>114.00</td></tr> <tr><td>Gray Gravel &amp; Clay</td><td>6.00</td><td>120.00</td></tr> <tr><td>Brown Sand &amp; Clay</td><td>6.00</td><td>126.00</td></tr> <tr><td>Gray Sand Medium Water Bearing</td><td>8.00</td><td>134.00</td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </tbody> </table>		Formation Description	Thickness	Depth to Bottom	Black Topsoil Sandy	1.00	1.00	Brown Sand	11.00	12.00	Brown Clay & Sand	6.00	18.00	Gray Clay Soft	27.00	45.00	Gray Clay & Gravel	25.00	70.00	Gray Clay Soft	38.00	108.00	Gray Clay & Gravel	6.00	114.00	Gray Gravel & Clay	6.00	120.00	Brown Sand & Clay	6.00	126.00	Gray Sand Medium Water Bearing	8.00	134.00									
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Gray Sand Medium Water Bearing	8.00	134.00																																											
<b>Fittings:</b> Neoprene packer, Bottom plug																																													
<b>Well Grouted:</b> Yes <b>Grouting Material:</b> Bentonite dry granular <b>Bags:</b> 5.00 <b>Grouting Method:</b> Driven/dry grout <b>Additives:</b> None <b>Depth:</b>		<b>Geology Remarks:</b>																																											
<b>Wellhead Completion:</b> Pitless adapter																																													
<b>Nearest Source of Possible Contamination:</b> <b>Type:</b> Septic tank <b>Distance:</b> 120 ft. <b>Direction:</b> North		<b>Drilling Machine Operator Name:</b> Todd Hecksel <b>Employment:</b> Employee <b>Pump Installer:</b> Wm. Hecksel, III <b>Contractor Type:</b> Water Well Drilling Contractor <b>Business Name:</b> Hecksel & Hecksel Water Well <b>Reg No:</b> 70-2260 <b>Business Address:</b> 19066 96th Avenue, Coopersville, MI, 49404																																											
<b>Abandoned Well Plugged:</b> Yes		<b>Water Well Contractor's Certification</b> This well was drilled under my supervision and this report is true to the best of my knowledge and belief.  <b>Signature of Registered Contractor</b> <b>Date</b>																																											
<b>Casing Diameter:</b> 2 in. <b>Plugging Material:</b> Bentonite chips/pellets <b>No. of Bags:</b> 3.50 <b>Casing Removed:</b> No <b>Well Depth:</b> 130 ft.																																													
<b>General Remarks:</b>																																													
<b>Other Remarks:</b>																																													

26-5



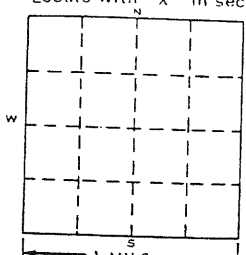
26-6



Well No. - 700212705

## WATER WELL RECORD

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

<b>1 LOCATION OF WELL</b> County <u>Ottawa</u>		Township Name <u>Polkton</u>		Fraction <u>NW 1/4 NW 1/4 NW 1/4</u>	Section Number <u>27</u>	Town Number <u>8 N/S.</u>	Range Number <u>15 E/W.</u>
<b>Distance And Direction from Road Intersections</b> <u>250' from Arthur St.</u>							
<b>Street address &amp; City of Well Location</b> <u>7200 Arthur St., Coopers-villt, Michigan</u>							
<b>Locate with "X" in section below</b> 							
<b>2 FORMATION</b>		THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	<b>3 OWNER OF WELL:</b> Borkholder Post Buildings Address <u>11335 Apple Drive, Nunica, Michigan</u>			
<u>Clay</u>		<u>20</u>	<u>20</u>	<b>4 WELL DEPTH:</b> (completed) <u>230</u> ft. Date of Completion <u>May 31, 1974</u>			
<u>Clay &amp; Gravel</u>		<u>60</u>	<u>80</u>	<b>5</b> <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug <input type="checkbox"/> Hollow rod <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/>			
<u>Clay</u>		<u>50</u>	<u>130</u>	<b>6 USE:</b> <input type="checkbox"/> Domestic <input type="checkbox"/> Public Supply <input type="checkbox"/> Industry <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Test Well <input type="checkbox"/>			
<u>Sand &amp; Gravel mixed w/clay</u>		<u>25</u>	<u>155</u>	<b>7 CASING:</b> Threaded <input checked="" type="checkbox"/> Welded <input type="checkbox"/> Height: Above/Below Surface <u>1</u> ft. Weight <u>11</u> lbs./ft. Drive Shoe? Yes <input type="checkbox"/> No <input type="checkbox"/>			
<u>Clay &amp; Gravel</u>		<u>39</u>	<u>194</u>	<b>8 SCREEN:</b> <u>NONE</u> Type: _____ Dia.: _____ Slot/Gauze _____ Length _____ Set between _____ ft. and _____ ft. Fittings: _____			
<u>Michigan lime</u>		<u>9</u>	<u>203</u>	<b>9 STATIC WATER LEVEL</b> <u>48</u> ft. below land surface			
<u>MARSHALL</u>		<u>27</u>	<u>230</u>	<b>10 PUMPING LEVEL</b> below land surface _____ ft. after <u>4</u> hrs. pumping <u>50</u> g.p.m. _____ ft. after _____ hrs. pumping _____ g.p.m.			
				<b>11 WATER QUALITY</b> in Parts Per Million: Iron (Fe) _____ Chlorides (Cl) _____ Hardness _____ Other _____			
				<b>12 WELL HEAD COMPLETION:</b> <input type="checkbox"/> In Approved Pit <input checked="" type="checkbox"/> Pitless Adapter <input type="checkbox"/> 12" Above Grade			
				<b>13 Well Grouted?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> _____ Depth: From <u>surface</u> ft. to _____ ft.			
				<b>14 Nearest Source of possible contamination</b> _____ feet _____ Direction _____ Type _____ Well disinfected upon completion <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
				<b>15 PUMP:</b> <input type="checkbox"/> Not installed Manufacturer's Name <u>RED SACKET</u> Model Number <u>575N1-125P</u> Volts <u>230</u> Length of Drop Pipe <u>90</u> ft. capacity <u>7.5</u> G.P.M. Type: <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Jet <input type="checkbox"/> Reciprocating			
<b>16 Remarks, elevation, source of data, etc.</b>				<b>17 WATER WELL CONTRACTOR'S CERTIFICATION:</b> This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. <u>C.S. Raymer Company</u> <u>0384</u> REGISTERED BUSINESS NAME REGISTRATION NO. Address <u>3311 Three Mile Rd., N.W., Grand Rapids, Mich.</u> Signed <u>[Signature]</u> Date <u>12-31-74</u> AUTHORIZED REPRESENTATIVE			

USE A 2ND SHEET IF NEEDED

VEY SAMPLE No.   
MAR 11 1970

ACT 294 PA 1965

Not needed

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

2

D67d 100M (Rev. 12-68)

## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

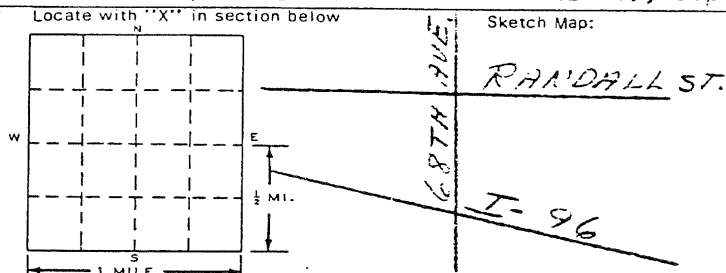
## 1 LOCATION OF WELL

County <b>Ottawa</b>	Township Name <b>Polkton</b>	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number <b>27</b>	Town Number <b>8</b> N/S.	Range Number <b>14</b> E/W.
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Distance And Direction from Road Intersections

**40° S. of Randall - W. of 68th Avenue**Street address & City of Well Location **68th & Randall St., Coopersville**

Locate with "X" in section below



## 3 OWNER OF WELL:

**Manufacturers Bank of Coopersville**Address **345 Main St., Coopersville, Michigan 49404**

## 4 WELL DEPTH: (completed) Date of Completion

**260** ft. **Sept. 11, 1980**5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☐ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☒ Commercial  
☐ Test Well ☐7 CASING: Threaded ☒ Welded ☐ Height: Above/BelowDiam. **4** in. to **226** ft. Depth Surface **1** ft.**4** in. to **226** ft. Depth Weight **11** lbs./ft.Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: **NONE** Dia.: \_\_\_\_\_

Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_

Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

**65** ft. below land surface

## 10 PUMPING LEVEL below land surface

\_\_\_\_\_ ft. after **4** hrs. pumping **40** g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) **2.0** Chlorides (Cl) \_\_\_\_\_Hardness **36** grs. Other \_\_\_\_\_12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☒ Yes ☐ No☐ Neat Cement ☒ Bentonite ☐Depth: From **surface** ft. to **226** ft.

## 14 Nearest Source of possible contamination

**30** feet **N.** Direction **Sewer Line** Type \_\_\_\_\_Well disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installedManufacturer's Name **Burks**Model Number **330SN180** HP **3** Volts **208**Length of Drop Pipe **150** ft. capacity **35** G.P.M.Type: ☒ Submersible☐ Jet☐ Reciprocating

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

**Raymer Company, Inc.**

REGISTERED BUSINESS NAME

**0384**

REGISTRATION NO.

Address **3311 Three Mile Rd., N.W., Grand Rapids, MI.**Signed **[Signature]**

AUTHORIZED REPRESENTATIVE

Date **Oct. 31, 1980**

## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

## 1 LOCATION OF WELL

County

Township Name

Fraction

Section Number

Town Number

Range Number

OTTAWA

POLKTON

1/4

1/4

22

T 21 W. S.

R 14 E. W.

Distance And Direction from Road Intersections

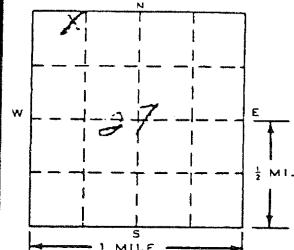
1/4 MILE EAST OF 68TH AVE  
ON SOUTH SIDE OF ARTHUR

Street address &amp; City of Well Location

UNKNOWN

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL:

MURICE LAUG

Address 66 CLIFF ST

CANADONHARIE, NEW YORK

4 WELL DEPTH: (completed) Date of Completion

248 ft. 21 JUNE 78

☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐

 6 USE: ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well ☐
7 CASING: Threaded ☒ Welded ☐

Height: Above/Below

Diam.

Surface 3 ft.

Weight 11 lbs./ft.

Drive Shoe? Yes ☒ No ☐

8 SCREEN:

Type: R Dia.: 4

Slot/Gauze: ROCK WELL Length: 36 FT 3" LINER

Set between ft. and ft.

Fittings: 36 FT 3" LINER

9 STATIC WATER LEVEL

50 ft. below land surface

10 PUMPING LEVEL below land surface

ft. after hrs. pumping g.p.m.

UNKNOWN

ft. after hrs. pumping g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) Chlorides (Cl)

UNKNOWN

Hardness Other

12 WELL HEAD COMPLETION:

☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From ft. to ft.

14 Nearest Source of possible contamination

50 feet IN Direction SEPTIC Type

Well disinfected upon completion ☒ Yes ☐ No

15 PUMP:

☐ Not installed

Manufacturer's Name RED JACKET

Model Number S100N1 HP 1 Volts 220

Length of Drop Pipe 84 ft. capacity 20 G.P.M.

Type: ☒ Submersible☐ Jet☐ Reciprocating

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Wahlfeld &amp; Son 0395

REGISTERED BUSINESS NAME

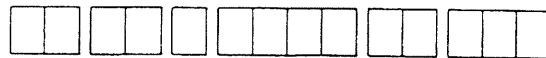
REGISTRATION NO.

4444 Westshore Dr NW

Address Comstock Mich 49826

Signed Con Wahlfeld Date 21 June 78

AUTHORIZED REPRESENTATIVE



## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

12

## 1 LOCATION OF WELL

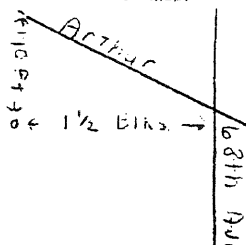
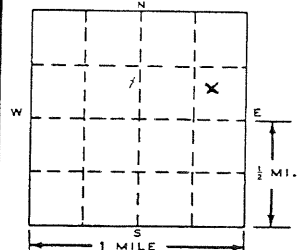
County <u>Ottawa</u>	Township Name <u>Polkton</u>	Fraction <u>NW 1/4 SE 1/4 NE 1/4</u>	Section Number <u>27</u>	Town Number <u>7 N/S.</u>	Range Number <u>14 E/W.</u>
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## Distance And Direction from Road Intersections

About 1 1/2 Eik. west of bath Ave & Arthur  
Then about 190 ft. south of Arthur St.  
Street address & City of Well Location Arthur St. Coopersville

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

Address

Polkton Township Hall  
Arthur St  
Coopersville Mich

## 4 WELL DEPTH: (completed) Date of Completion

280 ft. 8-15-80

5 <input checked="" type="checkbox"/> Cable tool	<input type="checkbox"/> Rotary	<input type="checkbox"/> Driven	<input type="checkbox"/> Dug
<input type="checkbox"/> Hollow rod	<input type="checkbox"/> Jetted	<input type="checkbox"/> Bored	<input type="checkbox"/>
6 USE: <input type="checkbox"/> Domestic	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Industry	<input type="checkbox"/>
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Air Conditioning	<input checked="" type="checkbox"/> Commercial	<input type="checkbox"/>
<input type="checkbox"/> Test Well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7 CASING: Threaded ☒ Welded ☐

Diam.

Height: Above/Below  
Surface 3 1/2 ft.

4 in. to 221 ft. Depth  
2 in. to 240 ft. Depth

Weight 10.8 lbs./ft.Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: NONE Dia.: \_\_\_\_\_  
Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_  
Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

62 ft. below land surface

## 10 PUMPING LEVEL below land surface

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping 60 g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) \_\_\_\_\_ Chlorides (Cl) \_\_\_\_\_

Hardness \_\_\_\_\_ Other \_\_\_\_\_

12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

## 14 Nearest Source of possible contamination

75 feet north Direction Septic System TypeWell disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installedManufacturer's Name GouldsModel Number 2SEL-20-1/2 HP 2 Volts 230Length of Drop Pipe 105 ft. capacity 30 G.P.M.Type: ☒ Submersible☐ Jet☐ Reciprocating

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true  
to the best of my knowledge and belief.

Mal Hecksel Pros. 70-0337  
REGISTERED BUSINESS NAME REGISTRATION NO.

Address 18910 96th Ave. Coopersville

Signed Mal Hecksel Date 9-26-80  
AUTHORIZED REPRESENTATIVE



700212701

## WATER WELL RECORD

 MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

Well No. MAY 5

1967 Loc. E-1366.100

ACT 294

RA 1965

Loc. N-510,950

ELE-680

1 LOCATION OF WELL

County

Ottawa

Twp.

Polkton

Fraction NE SE NW

Section No.

27

Town

8

Range

14

N/S.

E/W.

Distance And Direction from Road Intersections

 Corner of State (old 27) and 68  
South of State 180 ft, 35 ft east of 68  
Street address & City of Well Location

OWNER No.

3 OWNER OF WELL:

Address:

 James Preston  
68th Ave.  
Coopersville, Mich.

2 FORMATION

 THICKNESS  
OF  
STRATUM

 DEPTH TO  
BOTTOM OF  
STRATUM

184 Ft. Clay

48 Ft. Clay &amp; gravel

25 Ft. Limestone

28 Ft. Green Mica schell

4 WELL DEPTH: (completed) Date of Completion

287

ft.

March 67

 5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐

 6 USE: ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well

 7 CASING: Threaded ☒ Welded ☐  
Diam. 4 in. to ft. Depth Height: Above/Below  
surface ft.  
Weight lbs/ft.  
Drive Shoe? Yes ☒ No ☐

 8 SCREEN: Type: Rock well Dia.:  
Slot/Gauze Length  
Set between ft. and ft.  
Fittings:

 9 STATIC WATER LEVEL  
56 ft. below land surface

 10 PUMPING LEVEL below land surface  
ft. after hrs. pumping g.p.m.  
ft. after hrs. pumping g.p.m.

 11 WATER QUALITY in Parts Per Million:  
Iron (Fe) Chlorides (Cl)  
Hardness

 12 WELL HEAD COMPLETION: ☐ In Approved Pit  
☒ Pitless Adapter ☐ 12" Above Grade

 13 GROUTING:  
Well Grouted? ☒ Yes ☐ No  
Material: ☐ Neat Cement ☐  
Depth: From ft. to ft.

 14 SANITARY:  
Nearest Source of possible contamination  
feet Direction Type  
Well disinfected upon completion ☐ Yes ☐ No

 15 PUMP:  
Manufacturer's Name Burke  
Model Number HP 172  
Length of Drop Pipe ft. capacity G.P.M.  
Type: ☒ Submersible ☐  
☐ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 WATER WELL CONTRACTOR'S CERTIFICATION:

 This well was drilled under my jurisdiction and this report is true  
to the best of my knowledge and belief.

 Rasmus Well Drilling 4426  
REGISTERED BUSINESS NAME REGISTRATION NO.

Address Rt. 2-80 41 Ave. Coopersville, Mich.

Signed Frank Rasmus Date 4-5-67

## WATER WELL AND PUMP RECORD

PART 127 ACT 368, P.A. 1978

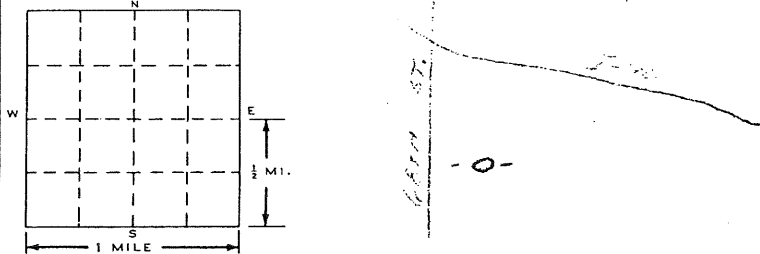
PERMIT NUMBER

1 LOCATION OF WELL		TOWNSHIP NAME		FRACTION		SECTION NUMBER		TOWN NUMBER		RANGE NUMBER	
County <b>Ottawa</b>		Folkton		$\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$		27		8 N/S		14 E/W	
Distance And Direction From Road Intersection <b>150' East of 68th Avenue</b>											
Street Address & City of Well Location <b>Garfield &amp; 68th Avenue, Coopersville, Michigan</b>											
Address Same As Well Location? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											
4 WELL DEPTH: (completed) <b>300</b> ft. Date of Completion <b>Nov. 24, 1982</b>											
5 <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug <input type="checkbox"/> Hollow rod <input type="checkbox"/> Auger <input type="checkbox"/> Jetted <input type="checkbox"/>											
6 USE: <input type="checkbox"/> Domestic <input type="checkbox"/> Type I Public <input type="checkbox"/> Type III Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Type IIa Public <input type="checkbox"/> Heat pump <input type="checkbox"/> Test Well <input type="checkbox"/> Type IIb Public <input checked="" type="checkbox"/> Commercial											
7 CASING Diameter <input checked="" type="checkbox"/> Steel <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Plastic <input type="checkbox"/> Welded _____ in. to _____ ft. depth _____ in. to _____ ft. depth Grouted Drill Hole Diameter <b>4</b> in. to <b>205</b> ft. depth _____ in. to _____ ft. depth Height: Above/Below Surface <b>1</b> ft. Weight <b>11</b> lbs./ft. Drive Shoe <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											
8 SCREEN <input checked="" type="checkbox"/> Not Installed Type _____ Diameter _____ Slot/Gauze _____ Length _____ Set between _____ ft. and _____ ft. FITTINGS: <input type="checkbox"/> K-Packer <input type="checkbox"/> Lead Packer <input type="checkbox"/> Bremer Check <input type="checkbox"/> Blank above screen _____ ft. Other _____											
9 STATIC WATER LEVEL: _____ ft. below land surface <input type="checkbox"/> Flow											
10 PUMPING LEVEL: below land surface _____ ft. after <b>4</b> hrs. pumping at <b>50</b> G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.											
11 WELL HEAD COMPLETION <input checked="" type="checkbox"/> Pitless adapter <input type="checkbox"/> 12" above grade <input type="checkbox"/> Basement offset <input type="checkbox"/> Approved pit											
12 WELL GROUTED? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes From <b>0</b> to <b>205</b> ft. <input type="checkbox"/> Neat cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other _____ No. of bags of cement _____ Additives _____											
13 Nearest source of possible contamination Type <b>Septic Tank</b> Distance <b>100</b> ft. Direction <b>N.</b> Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											
14 PUMP: <input type="checkbox"/> Not Installed <input type="checkbox"/> Pump Installation Only Manufacturer's name <b>Red Jacket</b> Model number <b>5100M-8CC</b> HP <b>1</b> Volts <b>230</b> Length of Drop Pipe <b>130</b> ft. capacity <b>20</b> G.P.M. TYPE: <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Jet PRESSURE TANK: Manufacturer's name <b>Antrol</b> Model number <b>WX 251</b> Capacity _____ Gallons											
15. Remarks, elevation, source of data, etc. <b>Water Test</b> <b>42 grains hard</b> <b>1.5 p.p.m. Iron</b> <b>NO Chlorides</b>											
16. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief <b>Raymer Company, Inc.</b> <b>0384</b> REGISTERED BUSINESS NAME REGISTRATION NO. Address <b>3371 Three Mile Rd., N.W., Grand Rapids, MI</b> Signed <b>[Signature]</b> Date <b>Dec. 13, 1982</b> AUTHORIZED REPRESENTATIVE											

## WATER WELL AND PUMP RECORD

PERMIT NUMBER

Parcel 70-05-27-400-010

<b>1 LOCATION OF WELL</b>			<b>3 OWNER OF WELL:</b>														
County <b>Ottawa</b>	Township Name <b>Polkton</b>	Fraction <b>1/4 1/4 1/4</b>	Section Number <b>27</b>	Town Number <b>8 N/8</b>	Range Number <b>14 E/W</b>												
Distance And Direction From Road Intersection <b>1/4 Mile South of I-96 - 100' East of 68th Street</b>			<b>Granger Electric</b> Address <b>15550 68th Street, Coopersville</b> Address Same As Well Location? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No														
Street Address & City of Well Location <b>15550 68th St., Coopersville</b> Locate with "X" in Section Below 			<b>4 WELL DEPTH:</b> Date Completed <b>10 28 93</b> <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Replacement Well <b>260 FT.</b> <b>5</b> <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug <input type="checkbox"/> Hollow rod <input type="checkbox"/> Auger <input type="checkbox"/> Jetted <input type="checkbox"/>														
<b>2 FORMATION DESCRIPTION</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;">FORMATION DESCRIPTION</th> <th style="width:20%;">THICKNESS OF STRATUM</th> <th style="width:20%;">DEPTH TO BOTTOM OF STRATUM</th> </tr> </thead> <tbody> <tr> <td><b>Clay</b></td> <td><b>194</b></td> <td><b>194</b></td> </tr> <tr> <td><b>Limestone</b></td> <td><b>7</b></td> <td><b>201</b></td> </tr> <tr> <td><b>Marshall Sandstone</b></td> <td><b>59</b></td> <td><b>260</b></td> </tr> </tbody> </table>			FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	<b>Clay</b>	<b>194</b>	<b>194</b>	<b>Limestone</b>	<b>7</b>	<b>201</b>	<b>Marshall Sandstone</b>	<b>59</b>	<b>260</b>	<b>6 USE:</b> <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Type I Public <input type="checkbox"/> Type III Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Type IIa Public <input type="checkbox"/> Heat pump <input type="checkbox"/> Test Well <input type="checkbox"/> Type IIb Public <input type="checkbox"/>		
			FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM												
			<b>Clay</b>	<b>194</b>	<b>194</b>												
			<b>Limestone</b>	<b>7</b>	<b>201</b>												
<b>Marshall Sandstone</b>	<b>59</b>	<b>260</b>															
<b>7 CASING:</b> Diameter <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Plastic <input checked="" type="checkbox"/> Threaded <input checked="" type="checkbox"/> Welded <b>5</b> in. to <b>200</b> ft. depth Height: Above/Below Surface <b>1</b> ft. <b>8</b> in. to <b>200</b> ft. depth Weight <b>2.8</b> lbs./ft. Grouted Drill Hole Diameter <b>8</b> in. to <b>200</b> ft. depth Drive Shoe <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																	
<b>8 SCREEN:</b> <input checked="" type="checkbox"/> Not Installed Type _____ Diameter _____ Slot/Gauze _____ Length _____ Set between _____ ft. and _____ ft. FITTINGS: <input type="checkbox"/> K-Packer <input type="checkbox"/> Lead Packer <input type="checkbox"/> Bremer Check <input type="checkbox"/> Blank above screen _____ ft. Other _____																	
<b>9 STATIC WATER LEVEL:</b> <b>60</b> ft. below land surface <input type="checkbox"/> Flow			<b>10 PUMPING LEVEL:</b> below land surface _____ ft. after <b>4</b> hrs. pumping at <b>60</b> G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.														
<b>11 WELL HEAD COMPLETION:</b> <input checked="" type="checkbox"/> Pitless adapter <input type="checkbox"/> 12" above grade <input type="checkbox"/> Basement offset <input type="checkbox"/> Approved pit			<b>12 WELL GROUTED?</b> <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes From <b>200</b> to <b>surface</b> <input checked="" type="checkbox"/> Neat cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____ No. of bags of cement <b>30</b> Additives _____														
<b>13 Nearest source of possible contamination</b> Type <b>Septic</b> Distance <b>150</b> ft. Direction <b>North</b> Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Was old well plugged? <input type="checkbox"/> Yes <input type="checkbox"/> No			<b>14 PUMP:</b> <input type="checkbox"/> Not Installed <input type="checkbox"/> Pump Installation Only Manufacturer's name <b>Grundfos</b> Model number <b>40S30-9</b> HP <b>3</b> Volts <b>460</b> Length of Drop Pipe <b>147</b> ft. capacity <b>40</b> G.P.M. TYPE: <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Jet PRESSURE TANK: Manufacturer's name <b>Amtrol</b> Model number <b>WX 350</b> Capacity _____ Gallons														
<b>15. Remarks, elevation, source of data, etc.</b>  7. Rig Operator's Name: _____			<b>16. WATER WELL CONTRACTOR'S CERTIFICATION:</b> This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. <b>Raymer Company, Inc.</b> <span style="float: right;"><b>0384</b></span> REGISTERED BUSINESS NAME <span style="float: right;">REGISTRATION NO.</span> Address <b>3311 Three Mile Rd., N.W., Grand Rapids</b> Signed <i>[Signature]</i> Date <b>Dec. 8, 1993</b> AUTHORIZED REPRESENTATIVE														

USE A 2ND SHEET IF NEEDED

# WATER WELL RECORD

ACT 294 PA 1965

 MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

## 1 LOCATION OF WELL

County

Ottawa

Township Name

Ponton

Fraction

SW 1/4 NW 1/4

Section Number

27

Town Number

2 N/S.

Range Number

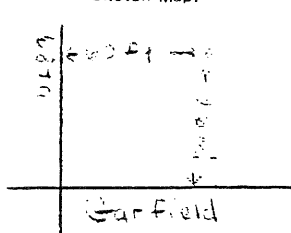
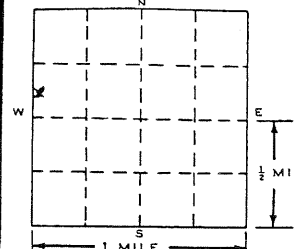
14 E/W.

## Distance And Direction from Road Intersections

About 0.6 mi. north of Garfield & with  
Then about 60 ft. east of center  
Street address & City of Well Location: 5616 10th Ave. Garfield

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

Address

Heltzer De Jonge

## 4 WELL DEPTH: (completed) Date of Completion

152 ft. 10-20-80

 5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐

 6 USE: ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well ☐
7 CASING: Threaded ☒ Welded ☐Height: Above/Below  
Surface 3 1/2 ft.
 4 in. to 150 ft. Depth  
 in. to ft. Depth  
 Drive Shoe? Yes ☒ No ☐

## 8 SCREEN: Johnson Super Water Truck

Type: 5 ft. Dia.: 4

Slot/Groove 12 Length 2 ft

Set between 150 ft. and 155 ft.

Fittings: Bottom 3" x 2" coupling &amp; 2" Plug

Top 2 ft. 2" x 2" x 1/2" Plug

## 9 STATIC WATER LEVEL

54 ft. below land surface

## 10 PUMPING LEVEL below land surface

ft. after hrs. pumping 50 g.p.m.

ft. after hrs. pumping g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) Chlorides (Cl)

Hardness Other

12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From ft. to ft.

## 14 Nearest Source of possible contamination

60 feet East Direction Satic System Type

Well disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installed

Manufacturer's Name Goulds

Model Number 233L-10-12 HP 1 Volts 230

Length of Drop Pipe 24 ft. capacity 2.5 G.P.M.

Type: ☒ Submersible☐ Jet ☐ Reciprocating

Pump Serial # G044950

## 2 FORMATION

THICKNESS  
OF  
STRATUMDEPTH TO  
BOTTOM OF  
STRATUM

f. H. sand

3

3

Clay yellow

11

14

Clay blue

96

110

gravel &amp; clay mixed

17

127

Clay blue

12

142

sand very coarse

water bearing

10

153

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

 MA 100 HUCKLEBLOOM 70-2337  
 REGISTERED BUSINESS NAME REGISTRATION NO.

Address 12715 7th Ave. Coopersville

 Signed Mark J. Huckelbloom Date 11/12/80  
 AUTHORIZED REPRESENTATIVE

WATER WELL RECORD  
ACT 294 PA 1965MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

## 1 LOCATION OF WELL

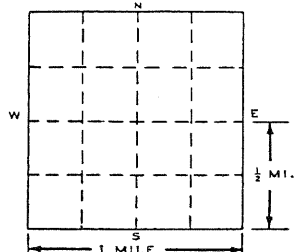
County <b>Ottawa</b>	Township Name <b>Polkton</b>	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number <b>27</b>	Town Number <b>8 N/8.</b>	Range Number <b>14 E/W.</b>
-------------------------	---------------------------------	---	-----------------------------	------------------------------	--------------------------------

Distance And Direction from Road Intersections

**230' W. of 68th Avenue**Street address & City of Well Location **15585 68th, Coopersville**

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

**Mr. Edward Hannenburg**Address **River Ridge Farms****15585 68th Ave., Coopersville, Michigan**

## 4 WELL DEPTH: (completed) Date of Completion

**260 ft. May 24, 1979**5 ☐ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☐ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well ☒ **Farm**7 CASING: Threaded ☒ Welded ☐ Height: Above/Below  
Diam. Surface **1** ft.**4** in. to **205** ft. Depth Weight **11** lbs./ft.  
in. to ft. Depth Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: **N O N E** Dia.: \_\_\_\_\_

Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_

Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

**68** ft. below land surface

## 10 PUMPING LEVEL below land surface

\_\_\_\_\_ ft. after **4** hrs. pumping **60** g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) **1.0** Chlorides (Cl) \_\_\_\_\_Hardness **43** p.p.m. Other \_\_\_\_\_12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☒ Yes ☐ No☐ Neat Cement ☒ Bentonite ☐Depth: From **surface** ft. to **205** ft.

## 14 Nearest Source of possible contamination

**170** feet **E.** Direction **Sentic Tank** Type \_\_\_\_\_Well disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installedManufacturer's Name **Red Jacket**Model Number **300T4-11DC** HP **3** Volts **230-3** phaseLength of Drop Pipe **130** ft. capacity **3.5** G.P.M.Type: ☒ Submersible☐ Jet☐ Reciprocating

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

**RAYMER COMPANY, INC.****0384**

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address **3311 Three Mile Rd., W., Grand Rapids, MI.**Signed *E. F. Hanburger*

AUTHORIZED REPRESENTATIVE

Date **7-20-79**

## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

10

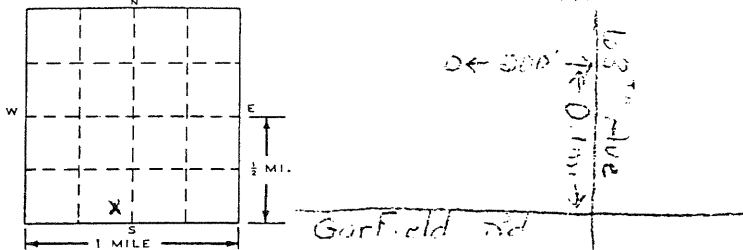
## 1 LOCATION OF WELL

County Ottawa Township Name Dolkton Fraction SE 1/4 Section Number 27 Town Number 9 N/S. Range Number 14 E/W.

Distance And Direction from Road Intersections  
About 0.1 mi North of Garfield Rd - 68th Ave  
Then about 200 ft West of 68th Ave  
Street address & City of Well Location 15843 68th Ave Cassopolis Mich

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

Gordon Handlogten  
Address 15843 68th Ave  
Cassopolis Mich

## 4 WELL DEPTH: (completed) Date of Completion

254 ft. 10-26-77

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐

6 USE: ☐ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well ☐

7 CASING: Threaded ☒ Welded ☐ Height: Above/Below

Diam. 4 in. to 147 ft. Depth Surface 3 1/2 ft.

2 in. to 254 ft. Depth Weight 2.2 lbs./ft.  
Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: None Dia.: \_\_\_\_\_  
Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_  
Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

167 ft. below land surface

## 10 PUMPING LEVEL below land surface

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping 50 g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) \_\_\_\_\_ Chlorides (Cl) \_\_\_\_\_

Hardness \_\_\_\_\_ Other \_\_\_\_\_

12 WELL HEAD COMPLETION: ☐ In Approved Pit

☒ Pitless Adapter ☐ 12" Above Grade

13 Well Grouted? ☐ Yes ☒ No

☐ Neat Cement ☐ Bentonite ☐

Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

## 14 Nearest Source of possible contamination

90 feet N Direction Septic Tank Type \_\_\_\_\_

Well disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installed

Manufacturer's Name Grundfos

Model Number 350W12411 HPL Volts 230

Length of Drop Pipe 15 ft. capacity 15 G.P.M.

Type: ☒ Submersible

☐ Jet

☐ Reciprocating

Grundfos Serial # C064910

## 16 Remarks, elevation, source of data, etc.

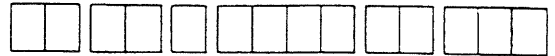
## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

D. W. Harkool Bros 701337  
REGISTERED BUSINESS NAME REGISTRATION NO.

Address 18976 96th Ave Cassopolis

Signed D. W. Harkool Date 10-2-77  
AUTHORIZED REPRESENTATIVE



Well No. -700212703

## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

## 1 LOCATION OF WELL

Loc. E 1,566,300

Loc. N-569,350

ELE-680

OF

PUBLIC HEALTH

County

Ottawa

Township Name

Pontiac

Fraction

SW 1/4 SW 1/4 E 1/4

Section Number

27

Town Number

2 N/S.

Range Number

14 E/W.

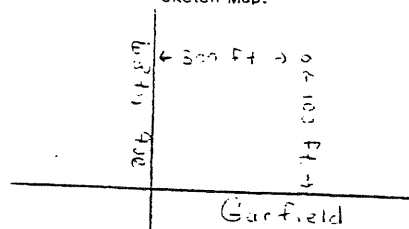
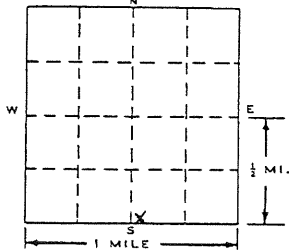
## Distance And Direction from Road Intersections

About 300 ft east of 68th Ave & Garfield  
Then about 100 ft north of Garfield

Street address &amp; City of Well Location 15220 68th Ave Coopersville

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

Address

George Hamilton  
15220 68th Ave  
Coopersville, MI

## 4 WELL DEPTH: (completed) Date of Completion

257 ft.

8-13-80

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well ☐7 CASING: Threaded ☒ Welded ☐

Height: Above/Below

Diam. Surface \_\_\_\_\_ ft.

4 in. to 200 ft. Depth

Weight \_\_\_\_\_ lbs./ft.

\_\_\_\_\_ in. to \_\_\_\_\_ ft. Depth

Drive Shoe? Yes ☐ No ☐

## 8 SCREEN:

Type: \_\_\_\_\_ Dia.: \_\_\_\_\_

Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_

Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

65 ft. below land surface

## 10 PUMPING LEVEL below land surface

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping 60 g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) \_\_\_\_\_

Chlorides (Cl) \_\_\_\_\_

Hardness \_\_\_\_\_

Other \_\_\_\_\_

## 12 WELL HEAD COMPLETION:

☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

## 14 Nearest Source of possible contamination

50 feet N Direction Septic Tank Type

Well disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installed

Manufacturer's Name \_\_\_\_\_

Model Number DEJ-07412 HP 1/4 Volts 220

Length of Drop Pipe 105 ft. capacity 12 G.P.M.

Type: ☒ Submersible☐ Jet☐ Reciprocating

Pump Serial # F069272

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

M &amp; W HOOKS &amp; BROS

70-0337

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address 13916 96th Ave Coopersville MI.

Signed

M. W. Hooks

Date

5-29-80

AUTHORIZED REPRESENTATIVE

## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

**1 LOCATION OF WELL** 5 1967

County Ottawa Twp. Polkton Fraction N.W. 1/4 Section No. 34 Town 8 Range 14 N/S. E/W.

Distance And Direction from Road Intersections Neely 1/2 mile west of 68th  
250-275 ft south of Garfield

Street address & City of Well Location Garfield, Mich.

**2 FORMATION**

FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
<u>188 Ft. Clay</u>	<u>188</u>	<u>188</u>
<u>4 Ft. dk. sand</u>	<u>4</u>	<u>192</u>
<u>10 Ft. Clay + gravel</u>	<u>10</u>	<u>202</u>
<u>23 Ft. green marl</u>	<u>23</u>	<u>225</u>
<u>rock</u>		

**3 OWNER OF WELL:** Garfield Housing  
Address 7120 Garfield Rd.  
Coopersville, Mich.

**4 WELL DEPTH:** (completed) 225 ft. Date of Completion March 67

**5** ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐

**6 USE:** ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well ☐ Farm Well

**7 CASING:** Diam. 4 in. Threaded ☒ Welded ☐ Height: Above/Below surface 202 ft. Depth 225 ft.  
Weight 4 lbs/ft. Drive Shoe? Yes ☐ No ☐

**8 SCREEN:** Type: Rock well Dia.: \_\_\_\_\_  
Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_  
Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Fittings: \_\_\_\_\_

**9 STATIC WATER LEVEL** 54 ft. below land surface

**10 PUMPING LEVEL** below land surface \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.  
\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

**11 WATER QUALITY** in Parts Per Million: Iron (Fe) \_\_\_\_\_ Chlorides (Cl) \_\_\_\_\_  
Hardness \_\_\_\_\_

**12 WELL HEAD COMPLETION:** ☐ In Approved Pit ☒ Pitless Adapter ☐ 12" Above Grade

**13 GROUTING:** Well Grouted? ☒ Yes ☐ No  
Material: ☒ Neat Cement ☐ \_\_\_\_\_  
Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**14 SANITARY:** Nearest Source of possible contamination \_\_\_\_\_ feet \_\_\_\_\_ Direction \_\_\_\_\_ Type \_\_\_\_\_  
Well disinfected upon completion ☐ Yes ☐ No

**15 PUMP:** Manufacturer's Name Burli  
Model Number \_\_\_\_\_ HP \_\_\_\_\_  
Length of Drop Pipe \_\_\_\_\_ ft. capacity \_\_\_\_\_ G.P.M.  
Type: ☐ Submersible ☐ \_\_\_\_\_  
☐ Jet ☐ Reciprocating

**16 Remarks, elevation, source of data, etc.**

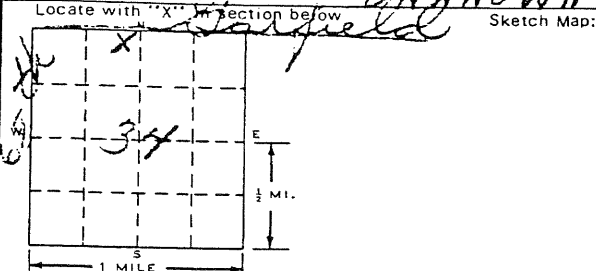
**17 WATER WELL CONTRACTOR'S CERTIFICATION:**  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
Russell Well Drilling 5426  
REGISTERED BUSINESS NAME REGISTRATION NO.  
Address Rt. 2 80th Ave Coopersville, Mich.  
Signed James Russell Date 4-5-67



WATER WELL RECORD  
ACT 294 PA 1965MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

## 1 LOCATION OF WELL

County <b>OTTAWA</b>	Township Name <b>POLKTON</b>	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number <b>34</b>	Town Number <b>17N</b> N/S.	Range Number <b>R14E</b>
-------------------------	---------------------------------	---	-----------------------------	--------------------------------	-----------------------------

Distance And Direction from Road Intersections:  
**1/2 mile east of 68th Ave  
on south side of Garfield**Street address & City of Well Location **UNKNOWN**3 OWNER OF WELL:  
**DAVID G. VEENEHMAN**  
Address **2152 MURKEE S.W.**  
**GRAND RAPIDS, MICH**4 WELL DEPTH: (completed) Date of Completion  
**247** ft. **5 Oct 70**5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored6 USE: ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well7 CASING: Threaded ☒ Welded ☐  
Diam. **3** in. to **222** ft. Depth  
**Rock** ft. Depth  
Height: **3** ft. Below Surface  
Weight **270** lbs./ft.  
Drive Shoe? Yes ☒ No ☐8 SCREEN:  
Type: **ROCK WELL**  
Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_  
Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Fittings: \_\_\_\_\_9 STATIC WATER LEVEL  
**50** ft. below land surface10 PUMPING LEVEL below land surface  
**UNKNOWN** g.p.m.  
\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.11 WATER QUALITY in Parts Per Million:  
Iron (Fe) **UNKNOWN**  
Chlorides (Cl) \_\_\_\_\_  
Hardness \_\_\_\_\_ Other \_\_\_\_\_12 WELL HEAD COMPLETION: ☐ In Approved Pit  
☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No  
☐ Neat Cement ☐ Bentonite ☐ \_\_\_\_\_  
Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.14 Nearest Source of possible contamination  
**50** feet **SW** Direction **SEPTIC** Type  
Well disinfected upon completion ☒ Yes ☐ No15 PUMP: ☐ Not installed  
Manufacturer's Name **BURKS**  
Model Number **MAV-02** HP **1** Volts **220**  
Length of Drop Pipe **24** ft. capacity **8** G.P.M.  
Type: ☐ Submersible  
☒ Jet ☐ Reciprocating

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

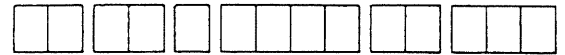
**House Vacant 2-4-71 &c.****25 no flow. Look up to Randol 7/15/71**

17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

**Wahlfeld Drilling Co. 0395**REGISTERED BUSINESS NAME **4444 Westshore Dr NW CP**  
AddressSigned **Doy Wahlfeld** Date **15 Oct 70**

AUTHORIZED REPRESENTATIVE

WATER WELL RECORD  
ACT 294 PA 1965MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

3

Not needed

## 1 LOCATION OF WELL

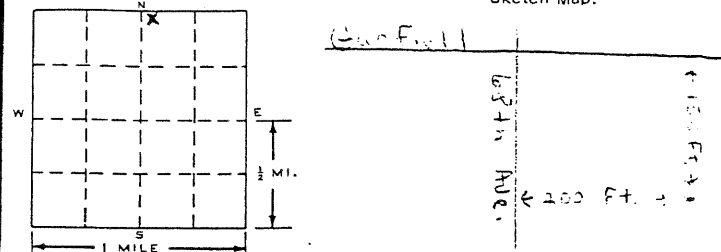
County <u>Ottawa</u>	Township Name <u>Polkton</u>	Fraction <u>1/4 1/4 1/4</u>	Section Number <u>34</u>	Town Number <u>2 N/S.</u>	Range Number <u>14 E/W.</u>
-------------------------	---------------------------------	--------------------------------	-----------------------------	------------------------------	--------------------------------

## Distance And Direction from Road Intersections

ABOUT 300 ft. east of 68th Ave. (Garfield)Then about 100 ft. south of GarfieldStreet address & City of Well Location 15170 68th Ave Cooper

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

Address Orwin K. Kosterhouse15170 68th AveCoopersville, Mich.

## 4 WELL DEPTH: (completed) Date of Completion

256 ft.5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☒ Domestic ☐ Public Supply ☐ Industry☐ Irrigation ☐ Air Conditioning ☐ Commercial☐ Test Well ☐7 CASING: Threaded ☒ Welded ☐

Height: Above/Below

Diam. Surface 3 1/2 ft.Weight 10.8 lbs./ft.Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: NONE

Dia.: \_\_\_\_\_

Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_

Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

64 ft. below land surface

## 10 PUMPING LEVEL below land surface

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping 50 g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) \_\_\_\_\_ Chlorides (Cl) \_\_\_\_\_

Hardness \_\_\_\_\_ Other \_\_\_\_\_

## 12 WELL HEAD COMPLETION:

☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

## 14 Nearest Source of possible contamination

55 feet SW Direction Septic Tank Type \_\_\_\_\_Well disinfected upon completion ☐ Yes ☐ No

## 15 PUMP:

☐ Not installedManufacturer's Name CourtsModel Number 13EM-10412 HP 1 Volts 230Length of Drop Pipe 105 ft. capacity 15 G.P.M.Type: ☒ Submersible☐ Jet☐ ReciprocatingPump Serial # F091096

## 2 FORMATION

THICKNESS  
OF  
STRATUMDEPTH TO  
BOTTOM OF  
STRATUMBlack dirt11clay yellow1617clay, blue131142gravel & clay mixed49147lime rock25222marshall rock34256

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Mark J. Hecksel

REGISTERED BUSINESS NAME

REGISTRATION NO. 77-0387Address 14970 46th Ave CooperSigned Mark J. HeckselDate 6-24-80

MAY 5 1967

## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

5

Not needed

1 LOCATION OF WELL		County <u>Ottawa</u>		Twp. <u>Polkton</u>		Fraction <u>N 1/4 E 1/4 NW 1/4</u>		Section No. <u>34</u>		Town <u>8</u>		Range <u>14</u>		N/S. <u>E/W.</u>	
Distance And Direction from Road Intersections		OWNER No. _____		3 OWNER OF WELL: <u>Orvin Klosterhouse</u> Address <u>15170 - 68th Ave.</u> <u>Coopersville, Mich.</u>											
Street address & City of Well Location		100ft		180ft		4 WELL DEPTH: (completed) <u>220</u> ft. Date of Completion <u>March 67</u>									
2 FORMATION		THICKNESS OF STRATUM		DEPTH TO BOTTOM OF STRATUM		5 <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug <input type="checkbox"/> Hollow rod <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/>									
188 Ft. Clay						6 USE: <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Public Supply <input type="checkbox"/> Industry <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Commercial <input type="checkbox"/> Test Well <input type="checkbox"/>									
16 Ft. sand						7 CASING: Diam. <u>30</u> in. to <u>204</u> ft. Depth <u>204</u> ft. Height: Above/Below surface _____ ft. Weight _____ lbs/ft. Drive Shoe? Yes <input type="checkbox"/> No <input type="checkbox"/>									
16 Ft. Rock						8 SCREEN: Type: <u>rock well</u> Dia.: _____ Slot/Gauze _____ Length _____ Set between _____ ft. and _____ ft. Fittings: _____									
						9 STATIC WATER LEVEL <u>45</u> ft. below land surface									
						10 PUMPING LEVEL below land surface _____ ft. after _____ hrs. pumping _____ g.p.m. _____ ft. after _____ hrs. pumping _____ g.p.m.									
						11 WATER QUALITY in Parts Per Million: Iron (Fe) _____ Chlorides (Cl) _____ Hardness _____									
						12 WELL HEAD COMPLETION: <input type="checkbox"/> In Approved Pit <input checked="" type="checkbox"/> Pitless Adapter <input type="checkbox"/> 12" Above Grade									
						13 GROUTING: Well Grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Material: <input type="checkbox"/> Neat Cement <input type="checkbox"/> _____ Depth: From _____ ft. to _____ ft.									
						14 SANITARY: Nearest Source of possible contamination _____ feet _____ Direction _____ Type _____ Well disinfected upon completion <input type="checkbox"/> Yes <input type="checkbox"/> No									
						15 PUMP: Manufacturer's Name <u>Reda</u> Model Number _____ HP <u>1/2</u> Length of Drop Pipe _____ ft. capacity _____ G.P.M. Type: <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> _____ <input type="checkbox"/> Jet <input type="checkbox"/> Reciprocating									
16 Remarks, elevation, source of data, etc.				17 WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. <u>Rasmus Well Drilling</u> 0426 REGISTERED BUSINESS NAME REGISTRATION NO. Address <u>Rt. 2 80th Ave. Coopersville, Mich</u> Signed <u>Frank Rasmus</u> 10-4-5 67 AUTHORIZED REPRESENTATIVE											

D67D 100M 6-66

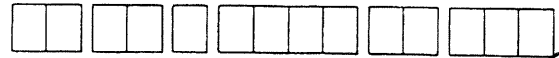
LOCAL HEALTH DEPT. COPY

34-4

## WATER WELL AND PUMP RECORD

PERMIT NUMBER

<b>1 LOCATION OF WELL</b>			<b>3 OWNER OF WELL:</b>																																
County <b>Ottawa</b>	Township Name <b>Polkton</b>	Fraction <b>1/4 1/4 1/4</b>	Section Number <b>34</b>	Town Number <b>8 N/S</b>	Range Number <b>14 E/W</b>																														
Distance And Direction From Road Intersection <b>60' East of 68th Avenue - South of Garfield</b>			<b>Laidlaw Waste Systems</b> Address <b>15550 68th Ave., Coopersville</b> Address Same As Well Location? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
Street Address & City of Well Location <b>15550 68th Ave., C'ville</b>			4 WELL DEPTH: <b>280 FT.</b> Date Completed <b>6 6 90</b> <input checked="" type="checkbox"/> New Well <input checked="" type="checkbox"/> Replacement Well																																
Locate with "X" in Section Below 			5 <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Dug <input type="checkbox"/> Hollow rod <input type="checkbox"/> Auger <input type="checkbox"/> Jetted																																
<b>2 FORMATION DESCRIPTION</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;">FORMATION DESCRIPTION</th> <th style="width:20%;">THICKNESS OF STRATUM</th> <th style="width:20%;">DEPTH TO BOTTOM OF STRATUM</th> </tr> </thead> <tbody> <tr><td>Sand</td><td>5</td><td>5</td></tr> <tr><td>Clay</td><td>134</td><td>139</td></tr> <tr><td>Clay &amp; Gravel</td><td>47</td><td>186</td></tr> <tr><td>Gypsum</td><td>15</td><td>201</td></tr> <tr><td>Shale</td><td>5</td><td>206</td></tr> <tr><td>Limestone &amp; Shale</td><td>6</td><td>212</td></tr> <tr><td>Limestone</td><td>5</td><td>217</td></tr> <tr><td>Shale</td><td>3</td><td>220</td></tr> <tr><td>Marshall Sandstone</td><td>60</td><td>280</td></tr> </tbody> </table>			FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	Sand	5	5	Clay	134	139	Clay & Gravel	47	186	Gypsum	15	201	Shale	5	206	Limestone & Shale	6	212	Limestone	5	217	Shale	3	220	Marshall Sandstone	60	280	6 USE: <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Type I Public <input type="checkbox"/> Type III Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Type IIa Public <input type="checkbox"/> Heat pump <input type="checkbox"/> Test Well <input type="checkbox"/> Type IIb Public		
			FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM																														
			Sand	5	5																														
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			Clay & Gravel	47	186																														
Gypsum	15	201																																	
Shale	5	206																																	
Limestone & Shale	6	212																																	
Limestone	5	217																																	
Shale	3	220																																	
Marshall Sandstone	60	280																																	
7 CASING: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Plastic 5 in. to 222 ft. depth Height: Above/Below Surface <b>1</b> ft. Weight <b>2.8</b> lbs./ft. Grouted Drill Hole Diameter _____ in. to _____ ft. depth Drive Shoe <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																			
8 SCREEN: <input checked="" type="checkbox"/> Not Installed Type _____ Diameter _____ Slot/Gauze _____ Length _____ Set between _____ ft. and _____ ft. FITTINGS: <input type="checkbox"/> K-Packer <input type="checkbox"/> Lead Packer <input type="checkbox"/> Bremer Check <input type="checkbox"/> Blank above screen _____ ft. Other _____																																			
9 STATIC WATER LEVEL: <b>83</b> ft. below land surface <input type="checkbox"/> Flow																																			
10 PUMPING LEVEL: below land surface _____ ft. after <b>4</b> hrs. pumping at <b>70</b> G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.																																			
11 WELL HEAD COMPLETION: <input checked="" type="checkbox"/> Pitless adapter <input type="checkbox"/> 12" above grade <input type="checkbox"/> Basement offset <input type="checkbox"/> Approved pit																																			
12 WELL GROUTED? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes From <b>222</b> to <b>surface</b> <input type="checkbox"/> Neat cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other _____ No. of bags of cement _____ Additives _____																																			
13 Nearest source of possible contamination Type <b>Septic tank</b> Distance <b>50</b> ft. Direction <b>East</b> Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Was old well plugged? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																			
14 PUMP: <input type="checkbox"/> Not Installed <input type="checkbox"/> Pump Installation Only Manufacturer's name <b>Aermotor</b> Model number <b>A12-100</b> -HP <b>1</b> Volts <b>230</b> Length of Drop Pipe <b>120</b> ft. capacity <b>18</b> G.P.M. TYPE: <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Jet PRESSURE TANK: Manufacturer's name <b>Used their tank</b> Model number _____ Capacity _____ Gallons																																			
15. Remarks, elevation, source of data, etc. <div style="text-align: center;">RECEIVED SEP 1 1990 OFFICE OF THE ENR. DIVISION</div>			16. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. <b>Raymer Company, Inc.</b> <b>0384</b> REGISTERED BUSINESS NAME REGISTRATION NO. Address <b>3311 Three Mile Rd., N.W., Grand Rapids, MI</b> Signed <i>[Signature]</i> Date <b>July 23, 1990</b> AUTHORIZED REPRESENTATIVE																																
17. Rig Operator's Name: _____																																			



## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

## 1 LOCATION OF WELL

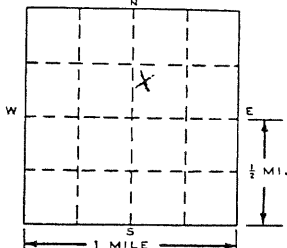
County Ottawa Township Name Milktown Fraction NEW 1/4 1/4 Section Number 34 Town Number 1 Range Number 14 N.W.

Distance And Direction from Road Intersections:  
0.3 mile south of 68th Ave - Garfield  
then 40ft east of 68th Ave

Street address & City of Well Location  
Nicks Auto Body 68th Ave

Locate with "X" in section below

Sketch Map:



Garfield  
68th Ave  
40ft

## 3 OWNER OF WELL:

Nick Van Ryswyk  
Address 07635 Leonard Rd  
Coopersville Mich

## 4 WELL DEPTH: (completed) Date of Completion

348 ft. 4 8 70

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored ☐

6 USE: ☐ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☒ Commercial  
☐ Test Well ☐

7 CASING: Threaded ☒ Welded ☐

Height: Above/Below

Diam. \_\_\_\_\_

\_\_\_\_\_ in. to \_\_\_\_\_ ft. Depth

\_\_\_\_\_ in. to \_\_\_\_\_ ft. Depth

Surface 3 ft.Weight 10.8 lbs./ft.Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: None Dia.: \_\_\_\_\_

Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_

Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

81 ft. below land surface

## 10 PUMPING LEVEL below land surface

34 ft. after 1 hrs. pumping 40 g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) \_\_\_\_\_ Chlorides (Cl) \_\_\_\_\_

Hardness \_\_\_\_\_ Other \_\_\_\_\_

## 12 WELL HEAD COMPLETION:

☐ In Approved Pit

☒ Pitless Adapter ☐ 12" Above Grade

13 Well Grouted? ☐ Yes ☐ No

☐ Neat Cement ☐ Bentonite ☐

Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

## 14 Nearest Source of possible contamination

110 feet East Direction Septic Tank Type \_\_\_\_\_

Well disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installed

Manufacturer's Name Goulds

Model Number 11FD 10 HP 1 Volts 330

Length of Drop Pipe 136 ft. capacity 12 G.P.M.

Type: ☒ Submersible

☐ Jet ☐ Reciprocating

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

1111 H. Hecksel 13105 0337  
REGISTERED BUSINESS NAME REGISTRATION NO.

Address 18976 - 96th Ave Coopersville

Signed 1111 H. Hecksel Date 3-10-71

AUTHORIZED REPRESENTATIVE

MICHIGAN DEPARTMENT  
76 OF  
PUBLIC HEALTH

D67d 100M (Rev. 12-68)

Well No. - 700212505

## WATER WELL RECORD

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

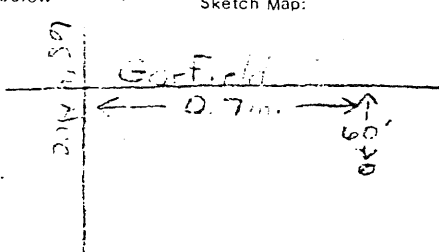
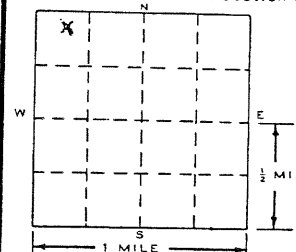
1 LOCATION OF WELL	Loc. E-1569,700	ACT 294 PA 1965	Loc. N-367,100	ELE-662
County	Township Name	Fraction	Section Number	Town Number
Ottawa	Dakota	NE 1/4	25	2 N/S.
Range Number 14 E/W.				

Distance And Direction from Road Intersections  
 About 0.7 mi. East of 68<sup>th</sup> Ave & Garfield  
 Then about 60 ft South of Garfield

Street address &amp; City of Well Location

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

Address

Dave DeMogd  
6364 Garfield

Connersville, Ind.

## 4 WELL DEPTH: (completed) Date of Completion

130 ft. 8-24-77

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored

6 USE: ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well

7 CASING: Threaded ☒ Welded ☐

Height: Above/Below

Diam.

Surface 3 1/2 ft.

4 in. to 123 ft. Depth

2 in. to 203 ft. Depth

Weight 28 lbs./ft.

Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: None

Dia.:

Slot/Gauze

Length

Set between

ft. and

ft.

Fittings:

## 9 STATIC WATER LEVEL

55 ft. below land surface

## 10 PUMPING LEVEL below land surface

59 ft. after 2 hrs. pumping 50 g.p.m.

ft. after hrs. pumping g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) Chlorides (Cl)

Hardness Other

## 12 WELL HEAD COMPLETION:

☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite

Depth: From ft. to ft.

## 14 Nearest Source of possible contamination

50 feet SW Direction Septic Tank Type

Well disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installed

Manufacturer's Name Goulds

Model Number 25EL-10410 HP 1 Volts 230

Length of Drop Pipe 97 ft. capacity 25 G.P.M.

Type: ☒ Submersible☐ Jet☐ Reciprocating

Pump Serial # C039101

## 2 FORMATION

THICKNESS  
OF  
STRATUMDEPTH TO  
BOTTOM OF  
STRATUM

Topsoil - Black Dirt

1

1

Clay - Yellow

30

21

Clay - Blue

127

148

Gravel some clay Dirty

35

123

Limerock Shale

15

148

Sandstone Light Gray

med. waterbearing

40

232

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

MICHIGAN DEPT.  
OF HEALTH

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

D. W. Hecksel

REGISTERED BUSINESS NAME

70-0337

REGISTRATION NO.

Address 18476 96<sup>th</sup> Ave Connersville

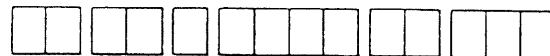
Signed D. W. Hecksel

Date 9-21-77

AUTHORIZED REPRESENTATIVE







Well No. - 700213504

## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT

OF  
PUBLIC HEALTH

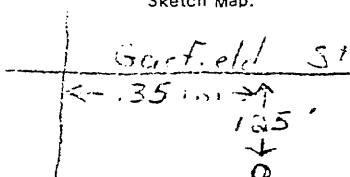
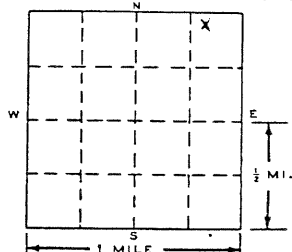
1 LOCATION OF WELL	Loc. E-1,523,300	Loc. N-567,050	ELE-629	PUBLIC HEALTH	
County	Township Name	Range Number	Section Number	Town Number	Range Number
Ottawa	Parkton	14 E/W.	35	8 N/S.	

Distance And Direction from Road Intersections  
 About 0.35 mi East of Garfield St + 60th Ave  
 Then about 125 ft South of Garfield  
 5708 Garfield Coopersville Mich

Street address &amp; City of Well Location

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL:  
 Robert Fowler  
 Address 5708 Garfield  
 Coopersville Michigan

4 WELL DEPTH: (completed) Date of Completion  
 212 ft. 7-14-73

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug  
☐ Hollow rod ☐ Jetted ☐ Bored

6 USE: ☒ Domestic ☐ Public Supply ☐ Industry  
☐ Irrigation ☐ Air Conditioning ☐ Commercial  
☐ Test Well

7 CASING: Threaded ☒ Welded ☐ Height: Above/Below  
 Diam. Surface 33 ft.  
 4 in. to 163 ft. Depth Weight 10.7 lbs./ft.  
 5 in. to 135 ft. Depth Drive Shoe? Yes ☒ No ☐

8 SCREEN:  
 Type: None Dia.:  
 Slot/Gauze Length  
 Set between ft. and ft.  
 Fittings:

9 STATIC WATER LEVEL  
 18 ft. below land surface

10 PUMPING LEVEL below land surface  
 21 ft. after 2 hrs. pumping 60 g.p.m.  
 ft. after hrs. pumping g.p.m.

11 WATER QUALITY in Parts Per Million:  
 Iron (Fe) Chlorides (Cl)  
 Hardness Other

12 WELL HEAD COMPLETION: ☐ In Approved Pit  
☒ Pitless Adapter ☐ 12" Above Grade

13 Well Grouted? ☐ Yes ☒ No  
☐ Neat Cement ☐ Bentonite  
 Depth: From ft. to ft.

14 Nearest Source of possible contamination  
 55 feet NE Direction Sestric Tank Type  
 Well disinfected upon completion ☒ Yes ☐ No

15 PUMP: ☐ Not installed  
 Manufacturer's Name Goulds  
 Model Number 1EM-07412 HP 3/4 Volts 230  
 Length of Drop Pipe 63 ft. capacity 20 G.P.M.  
 Type: ☒ Submersible ☐ Jet ☐ Reciprocating

2 FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Topsoil	1	1
Gravel - Course - Dirty	4	5
Clay Yellow	7	12
Clay - Blue	82	94
Gravel - Clayey	14	108
Clay Blue	40	148
Gravel - Course - Dirty	6	154
Clay Red	6	160
Lime Rock + Shale	18	178
Sandstone Lt Grey med (waterbearing)	34	212

USE A 2ND SHEET IF NEEDED

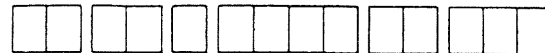
16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Mark Hecksel Bros 0337  
 REGISTERED BUSINESS NAME REGISTRATION NO.  
 Address 18976 96th Ave Coopersville

Signed Mark Hecksel Date 9-8-73  
 AUTHORIZED REPRESENTATIVE



## WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

## 1 LOCATION OF WELL

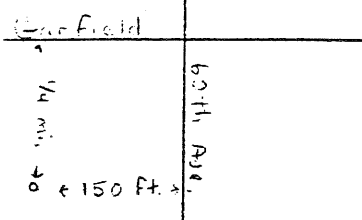
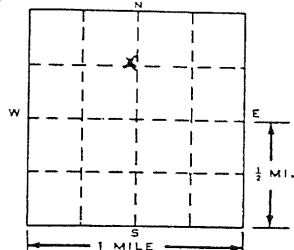
County <u>Ottawa</u>	Township Name <u>Polkton</u>	Fraction <u>SE 1/4 NE 1/4 NW 1/4</u>	Section Number <u>25</u>	Town Number <u>8 N/S.</u>	Range Number <u>14 E/W.</u>
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## Distance And Direction from Road Intersections

About 1/4 mi. south of Garfield & both Ave.Then about 10 ft. west of both Ave.Street address & City of Well Location 14769 both Ave. Coopersville

Locate with "X" in section below

Sketch Map:



## 3 OWNER OF WELL:

Address

Ralph Schmidt14769 both Ave.Coopersville, Mich.

## 4 WELL DEPTH: (completed) Date of Completion

212 ft. 5-13-805 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☒ Domestic ☐ Public Supply ☐ Industry☐ Irrigation ☐ Air Conditioning ☐ Commercial☐ Test Well7 CASING: Threaded ☒ Welded ☐

Diam.

Height: Above/BelowSurface 3 1/2 ft.4 in. to 103 ft. Depth4 in. to 103 ft. DepthWeight 103 lbs./ft.Drive Shoe? Yes ☒ No ☐

## 8 SCREEN:

Type: None Dia.: \_\_\_\_\_

Slot/Gauze \_\_\_\_\_ Length \_\_\_\_\_

Set between \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Fittings: \_\_\_\_\_

## 9 STATIC WATER LEVEL

32 ft. below land surface

## 10 PUMPING LEVEL below land surface

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping 40 g.p.m.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping \_\_\_\_\_ g.p.m.

## 11 WATER QUALITY in Parts Per Million:

Iron (Fe) \_\_\_\_\_ Chlorides (Cl) \_\_\_\_\_

Hardness \_\_\_\_\_ Other \_\_\_\_\_

12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

## 14 Nearest Source of possible contamination

50 feet N. Direction Septic Tank TypeWell disinfected upon completion ☒ Yes ☐ No

## 15 PUMP:

☐ Not installedManufacturer's Name GrundfosModel Number 12ES-0142A HP 24 Volts 220Length of Drop Pipe 103 ft. capacity 12 G.P.M.Type: ☒ Submersible☐ Jet☐ ReciprocatingPump Serial # E092226

## 2 FORMATION

THICKNESS  
OF  
STRATUMDEPTH TO  
BOTTOM OF  
STRATUMclay, black11clay, yellow1011clay, blue95106gravel & clay, mixed58164marl rock13177marshall rock35212

USE A 2ND SHEET IF NEEDED

## 16 Remarks, elevation, source of data, etc.

## 17 WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Mark J. Hockel  
REGISTERED BUSINESS NAME10-0387  
REGISTRATION NO.Address 12970 96th Ave CoopersvilleSigned Mark J. Hockel Date 5-29-80

AUTHORIZED REPRESENTATIVE



# Water Well And Pump Record

Completion is required under authority of Part 127 Act 368 PA 1978.



Import ID:

Failure to comply is a misdemeanor.

<b>Tax No:</b> 70-05-35-300-002 &003	<b>Permit No:</b> 00-122	<b>County:</b> Ottawa	<b>Township:</b> Polkton			
<b>Well ID: 70000002628</b>  <b>Elevation:</b> 650 ft.  <b>Latitude:</b> 43.03932143  <b>Longitude:</b> -85.93675234  <b>Method of Collection:</b> Address Matching-House Number		<b>Town/Range:</b> 08N 14W	<b>Section:</b> 35	<b>Well Status:</b>	<b>WSSN:</b>	<b>Source ID/Well No:</b>
		<b>Distance and Direction from Road Intersection:</b> well about .47 mile south of Garfield & 60th, then about 30' west of 60th				
		<b>Well Owner:</b> River Ridge Farms				
		<b>Well Address:</b> 14769 60th ave. Coopersville, MI 49404		<b>Owner Address:</b> 14769 60th ave. Coopersville, MI 49404		

<b>Drilling Method:</b> Cable Tool <b>Well Depth:</b> 228.00 ft. <b>Well Type:</b> Replacement <b>Casing Type:</b> Steel - galvanized <b>Casing Joint:</b> Threaded & coupled <b>Casing Fitting:</b> Drive shoe  <b>Diameter:</b> 4.00 in. to 162.00 ft. depth 3.00 in. to 196.00 ft. depth  <b>Borehole:</b> 8.00 in. to 25.00 ft. depth 4.00 in. to 196.00 ft. depth 3.00 in. to 228.00 ft. depth	<b>Well Use:</b> Other <b>Date Completed:</b> 4/20/2000 <b>Height:</b> 1.00 ft. above grade  <b>Static Water Level:</b> 32.00 ft. Below Grade <b>Well Yield Test:</b> Pumping level 38.00 ft. after 3.00 hrs. at 60 GPM <b>Yield Test Method:</b> Plunger	<b>Pump Installed:</b> Yes <b>Pump Installation Date:</b> 4/20/2000 <b>Manufacturer:</b> Goulds <b>Model Number:</b> 18LS15422 <b>Drop Pipe Length:</b> 105.00 ft. <b>Drop Pipe Diameter:</b> <b>Draw Down Seal Used:</b> No <b>Pressure Tank Installed:</b> No <b>Pressure Relief Valve Installed:</b> No	<b>Pump Installation Only:</b> No <b>HP:</b> 1.50 <b>Pump Type:</b> Submersible <b>Pump Capacity:</b> 20 GPM <b>Pump Voltage:</b> <b>Drilling Record ID:</b>																																				
<b>Screen Installed:</b> No <b>Intake:</b> Bedrock Well		<table border="1"><thead><tr><th>Formation Description</th><th>Thickness</th><th>Depth to Bottom</th></tr></thead><tbody><tr><td>Black Topsoil</td><td>1.00</td><td>1.00</td></tr><tr><td>Yellow Clay Brown</td><td>12.00</td><td>13.00</td></tr><tr><td>Brown Clay</td><td>13.00</td><td>26.00</td></tr><tr><td>Gray Clay Blue</td><td>36.00</td><td>62.00</td></tr><tr><td>Gray Clay &amp; Gravel</td><td>52.00</td><td>114.00</td></tr><tr><td>Dark Gray Boulders</td><td>1.00</td><td>115.00</td></tr><tr><td>Gray Clay &amp; Gravel</td><td>16.00</td><td>131.00</td></tr><tr><td>Gray Boulders</td><td>1.00</td><td>132.00</td></tr><tr><td>Brown Clay &amp; Gravel</td><td>25.00</td><td>157.00</td></tr><tr><td>Gray Limestone &amp; Shale</td><td>34.00</td><td>191.00</td></tr><tr><td>Gray Sandstone Water Bearing</td><td>37.00</td><td>228.00</td></tr></tbody></table>		Formation Description	Thickness	Depth to Bottom	Black Topsoil	1.00	1.00	Yellow Clay Brown	12.00	13.00	Brown Clay	13.00	26.00	Gray Clay Blue	36.00	62.00	Gray Clay & Gravel	52.00	114.00	Dark Gray Boulders	1.00	115.00	Gray Clay & Gravel	16.00	131.00	Gray Boulders	1.00	132.00	Brown Clay & Gravel	25.00	157.00	Gray Limestone & Shale	34.00	191.00	Gray Sandstone Water Bearing	37.00	228.00
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<b>Well Grouted:</b> Yes <b>Grouting Method:</b> Driven/dry grout <b>Grouting Material:</b> Bentonite dry granular <b>Bags:</b> 5.00 <b>Additives:</b> None <b>Depth:</b> 4.00 ft. to 162.00 ft.		<b>Geology Remarks:</b>																																					
<b>Wellhead Completion:</b> Pitless adapter																																							
<b>Nearest Source of Possible Contamination:</b> <b>Type:</b> Animal yard/Feedlot <b>Distance:</b> 80 ft. <b>Direction:</b> West		<b>Drilling Machine Operator Name:</b> Todd Hecksel <b>Employment:</b> Employee																																					
<b>Abandoned Well Plugged:</b> Yes  <b>Casing Removed:</b>		<b>Contractor Type:</b> Water Well Drilling Contractor <b>Business Name:</b> M & W Hecksel Bros. <b>Business Address:</b> 9175 Cleveland, Nunica, MI, 49448 <b>Reg No:</b> 70-0337 <b>Water Well Contractor's Certification</b> This well was drilled under my supervision and this report is true to the best of my knowledge and belief.  <b>Signature of Registered Contractor</b>  <b>Date</b>																																					
<b>General Remarks:</b> Old 4" well, 198ft. deep was plugged with 14 bags of neat cement with tremie pipe from bottom up.																																							
<b>Other Remarks:</b> Well Use:well used for dairy barn																																							



# Water Well And Pump Record

Completion is required under authority of Part 127 Act 368 PA 1978.

Failure to comply is a misdemeanor.



Import ID: 70081435006

<b>Tax No:</b>	<b>Permit No:</b>	<b>County:</b> Ottawa	<b>Township:</b> Polkton			
<b>Well ID: 70000002163</b>  Elevation: 645 ft. Latitude: 43.0374380644 Longitude: -85.93751919 Method of Collection: Interpolation-Map		<b>Town/Range:</b> 08N 14W	<b>Section:</b> 35	<b>Well Status:</b>	<b>WSSN:</b>	<b>Source ID/Well No:</b>
		<b>Distance and Direction from Road Intersection:</b> 1/2MIS OF GARGIELD & 60TH AVE; 75°W OF 60TH AVE				
		<b>Well Owner:</b> SCHMIDT, RALPH				
		<b>Well Address:</b> 14769 60TH AVE COOPERSVILLE, MI 49404		<b>Owner Address:</b> 14769 60TH AVE COOPERSVILLE, MI 49404		

<b>Drilling Method:</b> Cable Tool <b>Well Depth:</b> 230.00 ft. <b>Well Type:</b> Replacement	<b>Well Use:</b> Household <b>Date Completed:</b> 4/10/1972	<b>Pump Installed:</b> Yes <b>Pump Installation Date:</b> <b>Manufacturer:</b> Goulds <b>Model Number:</b> <b>Drop Pipe Length:</b> 84.00 ft. <b>Drop Pipe Diameter:</b> <b>Draw Down Seal Used:</b> No	<b>Pump Installation Only:</b> No <b>HP:</b> <b>Pump Type:</b> Submersible <b>Pump Capacity:</b> 0 GPM <b>Pump Voltage:</b> <b>Drilling Record ID:</b>																																													
<b>Casing Type:</b> Unknown <b>Casing Joint:</b> Threaded & coupled <b>Casing Fitting:</b> Drive shoe  Diameter: 4.00 in. to 161.00 ft. depth  Borehole:	<b>Height:</b> 0.00 ft. below grade	<b>Pressure Tank Installed:</b> No <b>Pressure Relief Valve Installed:</b> No																																														
<b>Static Water Level:</b> 36.00 ft. Below Grade <b>Well Yield Test:</b> Pumping level 40.00 ft. after 3.00 hrs. at 60 GPM	<b>Yield Test Method:</b> Unknown	<table border="1"><thead><tr><th>Formation Description</th><th>Thickness</th><th>Depth to Bottom</th></tr></thead><tbody><tr><td>Yellow Clay</td><td>12.00</td><td>12.00</td></tr><tr><td>Blue Clay</td><td>9.00</td><td>21.00</td></tr><tr><td>Blue Clay Gravely</td><td>27.00</td><td>48.00</td></tr><tr><td>Blue Clay</td><td>68.00</td><td>116.00</td></tr><tr><td>Blue Clay W/Gravel</td><td>42.00</td><td>158.00</td></tr><tr><td>Limestone</td><td>36.00</td><td>194.00</td></tr><tr><td>Sandstone Medium Water Bearing</td><td>36.00</td><td>230.00</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	Formation Description	Thickness	Depth to Bottom	Yellow Clay	12.00	12.00	Blue Clay	9.00	21.00	Blue Clay Gravely	27.00	48.00	Blue Clay	68.00	116.00	Blue Clay W/Gravel	42.00	158.00	Limestone	36.00	194.00	Sandstone Medium Water Bearing	36.00	230.00																						
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<b>Wellhead Completion:</b> Pitless adapter		<b>Geology Remarks:</b>																																														
<b>Nearest Source of Possible Contamination:</b> Type: Animal yard/Feedlot Distance: 110 ft. Direction: North		<b>Drilling Machine Operator Name:</b> <b>Employment:</b> Unknown																																														
<b>Abandoned Well Plugged:</b> No <b>Reason Not Plugged:</b>		<b>Contractor Type:</b> Unknown <b>Business Name:</b> <b>Business Address:</b>	<b>Reg No:</b> 70-0337																																													
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35-6